

WHAT IS CLAIMED IS:

1. An image forming apparatus connectable to a WAN and a LAN and capable of conducting a bidirectional communication with each terminal in the WAN or the LAN, comprising:

5 an image forming unit configured to form an image based on externally input data on a recording medium;

a substitutional sending/receiving unit configured to send a request signal to a web server in the WAN upon reception of a request signal for web server from a LAN
10 terminal in the LAN, and configured to receive content data sent from the web server as a response signal to the request signal;

a transfer unit configured to send the content data received by the substitutional sending/receiving unit to
15 the LAN terminal that has sent the request signal for web server;

an image formation requesting unit that causes the image forming unit to form an image based on the content data received by the substitutional sending/receiving unit
20 by inputting the content data to the image forming unit;
and

a switching unit configured to judge whether the content data received by the substitutional sending/receiving unit is suitable for capabilities of the
25 LAN terminal, configured to cause the transfer unit to

operate when judging that the content data is suitable for the capabilities of the LAN terminal, and configured to cause the image formation requesting unit to operate when judging that the content data is not suitable for the capabilities of the LAN terminal.

2. The image forming apparatus according to claim 1, wherein the image formation requesting unit sends the LAN terminal a message inquiring whether to cause the image forming unit to form an image based on the content data received by the substitutional sending/receiving unit, and inputs the content data received by the substitutional sending/receiving unit to the image forming unit when receiving an image formation instruction signal from the LAN terminal as a response to the message.

3. The image forming apparatus according to claim 1, further comprising a database for storing information relating to capabilities of each LAN terminal in the LAN, wherein the switching unit judges whether the content data received by the substitutional sending/receiving unit is suitable for the capabilities of the LAN terminal that has sent the request signal for web server on the basis of the information relating to capabilities of each LAN terminal stored in the database.

4. The image forming apparatus according to claim 3, further comprising a registering unit configured to judge

whether information relating to the capabilities of the LAN terminal that has sent the request signal for web server is registered in the database, and configured to acquire information relating to the capabilities of the LAN terminal from the LAN terminal and register the information in the database when judging that the information is not registered in the database.

5 The image forming apparatus according to claim 1, further comprising a data writing unit for writing the content data received by the substitutional sending/receiving unit to a recording medium for data storage,

15 wherein the switching unit selectively causes the image formation requesting unit or the data writing unit to operate depending on a type of the content data when judging that the content data is not suitable for the capabilities of the LAN terminal that has sent the request signal for web server.

20 6. The image forming apparatus according to claim 1, wherein the image forming unit is configured to print an image based on externally input data on a recording sheet.

25 7. The image forming apparatus according to claim 1, wherein the switching unit judges that the content data received by the substitutional sending/receiving unit is suitable for capabilities of the LAN terminal when an image

size of image data contained in the content data is within a screen size of a display unit of the LAN terminal.

8. The image forming apparatus according to claim 1, wherein the switching unit judges that the content data
5 received by the substitutional sending/receiving unit is suitable for capabilities of the LAN terminal when a display unit of the LAN terminal is capable of displaying image data contained in the content data and having a certain color depth.

10 9. The image forming apparatus according to claim 1, wherein the switching unit judges that the content data received by the substitutional sending/receiving unit is suitable for capabilities of the LAN terminal when a display unit of the LAN terminal is capable of displaying
15 image data that is color data or monochrome data and is contained in the content data.

10. The image forming apparatus according to claim 1, wherein the switching unit judges that the content data received by the substitutional sending/receiving unit is
20 suitable for capabilities of the LAN terminal when a format of image data contained in the content data is extractable in the LAN terminal.

11. An image forming apparatus connectable to a WAN and a LAN and capable of conducting a bidirectional communication
25 with each terminal in the WAN or the LAN, comprising:

an image forming unit configured to form an image based on externally input data on a recording medium; and

a communication control unit including a gateway unit and a wireless processing unit,

5 wherein the gateway unit comprises:

a substitutional sending/receiving unit configured to send a request signal to a web server in the WAN upon reception of a request signal for web server from a LAN terminal in the LAN, and configured to receive content data
10 sent from the web server as a response signal to the request signal;

a transfer unit configured to send the content data received by the substitutional sending/receiving unit to the LAN terminal that has sent the request signal for web
15 server;

an image formation requesting unit that causes the image forming unit to form an image based on the content data received by the substitutional sending/receiving unit by inputting the content data to the image forming unit;
20 and

a switching unit configured to judge whether the content data received by the substitutional sending/receiving unit is suitable for capabilities of the LAN terminal, configured to cause the transfer unit to
25 operate when judging that the content data is suitable for

the capabilities of the LAN terminal, and configured to cause the image formation requesting unit to operate when judging that the content data is not suitable for the capabilities of the LAN terminal.

5 12. A program product for causing an image forming apparatus that is connectable to a WAN and a LAN, capable of conducting a bidirectional communication with each terminal in the WAN or the LAN and including an image forming unit configured to form an image based on
10 externally input data on a recording medium to execute procedures, comprising:

a substitutional sending unit that sends a request signal to a web server in the WAN upon reception of a request signal for web server from a LAN terminal in the
15 LAN;

a substitutional receiving unit that receives content data sent from the web server as a response signal to the request signal;

a transferring unit that transfers the content data
20 received by the substitutional receiving unit to the LAN terminal that has sent the request signal for web server when judging that the content data is suitable for the capabilities of the LAN terminal; and

a requesting unit that requests to form an image based
25 on the content data by inputting the content data to the

image forming unit when judging that the content data is not suitable for capabilities of the LAN terminal.

13. The program product according to claim 12, wherein the requesting unit comprises:

5 a message sending unit that sends the LAN terminal a message inquiring whether to form an image based on the content data; and

 an inputting unit that inputs the content data to the image forming unit when an image formation instruction
10 signal is received from the LAN terminal as a response to the message.

14. An image forming apparatus connectable to a WAN and a LAN and capable of conducting a bidirectional communication with each terminal in the WAN or the LAN, comprising:

15 an image forming unit configured to form an image based on externally input data on a recording medium;

 a substitutional sending/receiving unit configured to send a request signal to a web server in the WAN upon reception of a request signal for web server from a LAN
20 terminal in the LAN, and configured to receive content data sent from the web server as a response signal to the request signal;

 a transfer unit configured to send the content data received by the substitutional sending/receiving unit to
25 the LAN terminal that has sent the request signal for web

server;

a data writing unit configured to write the content data received by the substitutional sending/receiving unit to a recording medium for data storage; and

5 a switching unit configured to judge whether the content data received by the substitutional sending/receiving unit is suitable for capabilities of the LAN terminal, configured to cause the transfer unit to operate when judging that the content data is suitable for
10 the capabilities of the LAN terminal, and configured to cause the data writing unit to operate when judging that the content data is not suitable for the capabilities of the LAN terminal.

15. The image forming apparatus according to claim 14,
15 wherein the data writing unit sends the LAN terminal a message inquiring whether to write the content data received by the substitutional sending/receiving unit to the recording medium for data storage, and writes the content data to the recording medium for data storage when
20 receiving an image formation instruction signal from the LAN terminal as a response to the message.

16. The image forming apparatus according to claim 14, further comprising a database for storing information relating to capabilities of each LAN terminal in the LAN,
25 wherein the switching unit judges whether the content

data received by the substitutional sending/receiving unit is suitable for the capabilities of the LAN terminal that has sent the request signal for web server on the basis of the information relating to capabilities of each LAN terminal stored in the database.

17. The image forming apparatus according to claim 16, further comprising a registering unit configured to judge whether information relating to the capabilities of the LAN terminal that has sent the request signal for web server is registered in the database, and configured to acquire information relating to the capabilities of the LAN terminal from the LAN terminal and register the information in the database when judging that the information is not registered in the database.

18. An image forming apparatus connectable to a WAN and a LAN and capable of conducting a bidirectional communication with each terminal in the WAN or the LAN, comprising:

an image forming unit configured to form an image based on externally input data on a recording medium;

a substitutional sending/receiving unit configured to send a request signal to a web server in the WAN upon reception of a request signal for web server from a LAN terminal in the LAN, and configured to receive content data sent from the web server as a response signal to the request signal;

a transfer unit configured to send the content data received by the substitutional sending/receiving unit to the LAN terminal that has sent the request signal for web server;

5 an announcing unit configured to announce that the content data received by the substitutional sending/receiving unit is not suitable for the capabilities of the LAN terminal; and

10 a switching unit configured to judge whether the content data received by the substitutional sending/receiving unit is suitable for capabilities of the LAN terminal, configured to cause the transfer unit to operate when judging that the content data is suitable for the capabilities of the LAN terminal, and configured to
15 cause the announcing unit to operate when judging that the content data is not suitable for the capabilities of the LAN terminal.